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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,224	07/10/2001	Shinya Tsukizaki	SCED 18.553	7633
26304 7590 08/01/2007 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			EXAMINER JANKUS, ALMIS R	
			ART UNIT 2628	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/902,224

Applicant(s)

TSUKIZAKI, SHINYA

Examiner

Almis R. Jankus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                  |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                             | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/20/07</u> . | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. Claims 1-18 are presented for examination.

2. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4, 6-7, 9 and 14-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyamoto et al.

Miyamoto, in disclosing a video game with enhanced three-dimensional character and background control due to environmental conditions, also discloses, with respect to claims 1, 4, 6 and 9, a recording medium (main memory 300, FIG.2) comprising a recorded program and data (col.7, 1.38) to be used in a program execution system (FIG.2) including a program execution device that executes various programs

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(coprocessor 200, FIG.2), at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device (joystick 45, FIG.6), and a display device that displays images outputted from said program execution device (display 58, FIG. 1), wherein said recorded program has a direction maintenance step by which if, along with a motion of any character on the display device (Mario----see col.37, 11.18-20), based on an operation instruction about a character motion direction (Mario's position controlled by joystick), a switching is made from a first scene to a second scene on the display device and said operation instruction is maintained (col.37, 11.35-42), and the direction of motion of said character in said second scene is maintained in coordination with the direction of motion of the character on a map in said first scene at least immediately before said switching is made (col.37, 11.38-42). In addition, col.37 lines 40-41, Miyamoto et al. teach that the camera perspective (point of view) changes with Mario's movement. Therefore, as Mario moves the camera angle changes generating different perspective views from different directions. See also figure 11B which shows the camera path.

Concerning claims 2 and 7, Miyamoto does not explicitly disclose wherein if said first scene on the display device is to be drawn based on a coordinate transformation based on a first viewpoint and said second scene on the display device is to be drawn based on a coordinate transformation based on a second viewpoint, said direction maintenance step has a computation step that computes the direction of motion of said character based on said first viewpoint. However, this disclosure is inherent because

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the Miyamoto invention operates on two levels: automatic camera mode and user-controlled camera mode (col.39, 11.15-17). If, in automatic camera mode, the camera "knows" to automatically switch to the optimum view of Mario's current position (col.39, 11.36-38), there must exist a computation step that dynamically computes Mario's position ("direction of motion of said camera based on said first viewpoint"). Therefore, claims 2 and 7 are rejected under 35 U.S.C. 10200).

Claims 14-18 require that the character motion direction is continuous from the first scene to the second scene; or that the direction of the character in the second scene is maintained for as long as the operation instruction is maintained by the user. As noted above, figure 11B shows the continuous movement of the character while the camera path changes continuously. Thus a new camera position will generate a different (second) scene from the previous (first) camera position.

In view of the foregoing, the examiner concludes that claims 1, 2, 4, 6-7, 9 and 14-18 have been anticipated under 35 USC 102(e) by Miyamoto.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter

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as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 5, 8 and 10-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Miyamoto.

Regarding claims 3, 5, 8 and 10-12, Miyamoto discloses a recording medium (main memory 300, FIG.2) comprising a program and data (col.7, 1.38) recorded thereon and which are to be used in a program execution system (FIG.2) including a program execution device that executes various programs (coprocessor 200, FIG.2), at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device (joystick 45, FIG.6), and a display device that displays images output from said program execution device (display 58, FIG. 1).

Continuing with the rejection of claims 3, 5, 8 and 10-12, Miyamoto does not specifically disclose a first computation step which determines, from a motion vector of any character on the display device by current operation instructions as seen from a prescribed viewpoint, at least position coordinates of said character, a viewpoint switching step that switches viewpoints if necessary, based on the position coordinates of said character. However, disclosure of such a first computation step is inherent because Mario is assigned a direction ("motion vector") as the joystick controls him (see col.40, 11.49-51), Mario's position is dynamically computed, as pointed out in the

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rejection of claim 2 above, and the viewpoint is automatically switched as Mario moves (FIG.23A and col.37, 11.35-42). Therefore, Miyamoto discloses the applicants' first computation step.

Still on the rejection of claims 3, 5, 8 and 10-12, Miyamoto also does not specifically disclose a second computation step which, if a current operation instruction (the user controlling Mario with the joystick) is maintained after said switching step (the changing of the camera viewpoint as Mario moves), determines, from the motion vector of said any character (the direction Mario is going) by said operation instruction as seen from the previous viewpoint (which scene Mario is in before the joystick moves him somewhere), at least the position coordinates of said character, and an image drawing step that draws a three-dimensional image of said character based on the current viewpoint, in accordance with the position coordinates of said character obtained by said first computation step and second computation step. But it is obvious that the position coordinates of Mario would be determined from the motion vector because Mario's position is dynamically computed and the motion vector (set by the joystick) would help to determine where Mario will be next. It is similarly obvious that an image drawing step would draw a three-dimensional image of said character based on said current viewpoint because that is classic creation of animation: one image is drawn at a time approximately every 30 milliseconds so that Mario's movement seems to be one continuous scene to the viewer, when in reality Mario's movement, and the place on the screen where Mario finally appears when the joystick action ceases (claim 12, "once

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said maintained operation instruction is terminated"), from an animation point of view, is the product of thousands of drawn images. Therefore, claims 3, 5, 8 and 10-12 are rejected under 35 U.S.C. 103(a).

Miyamoto also does not specifically disclose all of the elements of claim 13.

However, Miyamoto does disclose a program execution system (FIG.2) comprising: a program execution device (FIG.2) having a controller, and executing various programs (coprocessor 200, FIG.2); a display device that displays images outputted from said program execution device (display 58, FIG. 1); at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device, said operation instructions associated with movements of a character displayed on said display device (joystick 45, FIG.6); said display device further comprising a first viewpoint in which movements of said character is controlled in accordance with a first movement coordinate system (the viewpoint of the left camera in FIG.23A focusing on the left of the two positions of Mario (M)), and a second viewpoint in which movements of said character is controlled in accordance with a second movement coordinate system (the viewpoint of the right camera in FIG.23A focusing on the right of the two positions of Mario (M)), an image processing means configured as a controller program that operates in said controller in said program execution device (the program in col.7, 1.38 which resides in main memory 300, FIG.2), wherein said image processing means further comprises: a first computation means that determines position coordinates of said character in said first display device viewpoint, said position



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coordinates based on a first motion vector of said character in said first display device viewpoint in accordance with operation instructions (see item 9 above), a viewpoint switching means that switches from said first display device viewpoint to said second display device viewpoint if necessary based on the position coordinates of said character (inherent in the switching from one viewpoint to another that occurs in col.37, 11.35-42), a second computation means that determines position coordinates of said character in said second display device viewpoint, said position coordinates based on a second motion vector of said character in said second display device viewpoint in accordance with operation instructions (see item 10 above), and an image drawing means that draws a three-dimensional image of said character in said first or second display device viewpoint, in accordance with the position coordinates of said character obtained by said first computation means and second computation means respectively (see the "classic animation" argument concerning the rejection of claim 12 in item 10 above), wherein if said operation instruction is maintained during a switch from said first display device viewpoint to said second display device viewpoint, said second motion vector governing movement of said character in said second display device viewpoint is controlled in accordance with said first movement coordinate system (it is obvious that the position coordinates of Mario would be determined from the motion vector because Mario's position is dynamically computed and the motion vector (set by the joystick) would help to determine where Mario will be next, or where Mario will be when the movement of the joystick ceases), such that movement of said character is consistent between first and second display device viewpoints while said operation instruction is

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maintained during and immediately after the switch between said viewpoints (the first viewpoint is the viewpoint of the left camera in FIG.23A focusing on the left of the two positions of Mario (M), and the second viewpoint is the viewpoint of the right camera in FIG.23A focusing on the right of the two positions of Mario), and wherein once said operation instruction is terminated after said switch from said first display device viewpoint to said second display device viewpoint, said second motion vector governing movement of said character in said second display device viewpoint is controlled in accordance with said second movement coordinate system (it is obvious that the position coordinates of Mario would be determined from a motion vector--first, second, etc.--because Mario's position is dynamically computed and the motion vector (set by the joystick) would help to determine where Mario will be next, or where Mario will be when the movement of the joystick ceases).

Accordingly, in view of the foregoing, the examiner concludes that claims 3, 5, 8 and 10-13 have been rendered unpatentable under 35 USC 103(a) by Miyamoto.

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-5, 11, 12 and 14-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-3, 11, 12, 14 and 15 are directed to a recording medium comprising a recorded program. The instant

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specification defines the recording medium as including programs obtained by communication via a communication network. Therefore, the recording medium includes signals and waveform. Signals fail to fit any of the four statutory classes of invention. Claims 4, 5 and 16 are directed to a computer readable and executable program. Computer programs fail to fit any of the four statutory classes of invention.

8. Applicant's arguments filed 4/20/07 have been fully considered but they are not persuasive.

Applicant argues that there is no discussion as to a user's control of a character, nor any indication that a character's motion is continuous. At column 1 lines 61-62, Miyamoto teaches a player controller which controls a character. With respect to continuous motion, a player, in the course of a game, inherently moves characters in different directions, or continuously, or not at all, to accommodate the progression of a game, including during viewpoint switching. With respect to the second computation step, any time the viewpoint changes on the display screen, the mapping from 3D virtual space to screen space must be recalculated in order to transform the coordinates correctly.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R. Jankus whose telephone number is 571-272-7643. The examiner can normally be reached on M-F, 6:30-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJ



ALMIS R. JANKUS  
PRIMARY EXAMINER